

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
21 December 2000 (21.12.2000)

PCT

(10) International Publication Number  
**WO 00/76575 A2**

(51) International Patent Classification<sup>7</sup>: **A61M 37/00**

(21) International Application Number: **PCT/US00/16064**

(22) International Filing Date: **12 June 2000 (12.06.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:

60/138,738	11 June 1999 (11.06.1999)	US
60/140,257	18 June 1999 (18.06.1999)	US
60/207,677	26 May 2000 (26.05.2000)	US

(71) Applicant (*for all designated States except US*): **SPECTRX, INC.** [US/US]; 6000A Unity Drive, Norcross, GA 30071 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SAMUELS, Mark, A.** [US/US]; 4400 Missendell Lane, Norcross, GA 30092 (US). **KUMAR, Krishna, S.** [US/US]; Apartment E, 1020 Court Drive, Tucker, GA 30084 (US). **ROBINSON, Garrett, T.** [US/US]; Apartment K, 1001 Oak Chase Drive, Tucker, GA 30084 (US). **FARQUHAR, J., David** [US/US]; 4271 East Meadow Drive, Duluth, GA 30096 (US). **CALAWAY, Allison** [US/US]; 5454 Glenridge Drive #703, Atlanta, GA 30342 (US). **WILLIAMS, Deidre** [US/US]; 1647 Mary Lou Lane, SE, Atlanta, GA 30316 (US). **HATCH, Michael, R.** [US/US]; 131

Price Hills Trail, Sugar Hill, GA 30518 (US). **SMITH, Alan** [US/US]; 736 Greenview Avenue, NE, Atlanta, GA 30305-2733 (US). **WOODS, Teresa** [US/US]; 1101 Tree Trail Parkway, Norcross, GA 30093 (US).

(74) Agents: **FLOAM, D., Andrew et al.**; Needle & Rosenberg, P.C., The Candler Building, Suite 1200, 127 Peachtree Street, N.E., Atlanta, GA 30303-1811 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *Without international search report and to be republished upon receipt of that report.*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **INTEGRATED ALIGNMENT DEVICES, SYSTEMS, AND METHODS FOR EFFICIENT FLUID EXTRACTION, SUBSTANCE DELIVERY AND OTHER APPLICATIONS**

(57) Abstract: An alignment device and related systems and methods for aligning at least one apparatus with respect to a surface of a tissue. The alignment device comprises a tissue interface member suitable for positioning on the surface of the tissue and mating with the apparatus to maintain alignment of the apparatus during an operation of the apparatus. The alignment device is useful to align various apparatus that are part of a continuous analyte monitoring system.

**WO 00/76575 A2**

